Amendments to the Specification

Please replace the existing paragraph 0060 on pages 25 and 26 with paragraph 0060 below. The Examiner objected to the application because of alterations in the application that have not been initialed and/or dated as required by 37 CFR 1.52(c). The Examiner states that Wite-out exists at the bottom of Pg. 25. Applicant submits a supplemental declaration and a substitute paragraph 0060 free of miscellaneous markings.

[0060] As noted above, the delay response of a single resonator's cavity exists for different values of front mirror reflectivity, thickness, or cavity temperature. The all-pass filter produces a variation in time delay due to the resonate circulation of some wavelengths within the cavity. For wavelengths that are on resonance, the light effectively stays inside the cavity longer than for wavelengths that are off resonance. This causes a wavelength-dependent delay that produces dispersion. For one embodiment, this wavelength delay (t) is given by the equation:

$$\tau(\lambda) = \left(\frac{2n_g d}{c}\right) \frac{1-\rho^2}{1+\rho^2-2\rho\cos\left(\frac{4\pi n_g d}{\lambda}\right)}$$

where r is the front mirror amplitude reflectivity, d is the etalon thickness, l_o is the wavelength of the light in vacuum, and n_g is the group index of refraction. A change in the cavity temperature changes the group index of refraction n_g for the resonator cavity. Essentially, the equation illustrates that at a particular wavelength such as 1549.1 nm the amount of delay induced may be increased or decreases by changing a variable such as temperature in the equation 1.1. Further the equation illustrates that

A the center wavelength of the resonator cavity may be increased or decreased by changing a variable such as temperature in the equation 1.1.